AMENDMENTS O THE CLAIMS

1.(currently amended): A system for managing a communication network composed of a plurality of subnety orks, comprising:

a pl rality of element managers provided one for each of the plural subnetworks;

and

a net work manager accommodating said plural element managers for concentrated management thereof; wherein

for collecting QoS Quality of Service) capability management information on the corresponding element manager and notifying said network manager of the collected QoS capability management information;

said network manager having

a m. nagement section including a function object group which performs a control of OoS policy provessioning over the communication network and an information object group which manages nework information of each of the plural subnetworks, and for concentratedly managing various ooS capabilities of the whole communication network, based on the QoS capability manager lent information collected and notified by the individual element managers,

a request reception section for receiving a request for a target QoS capability, and
a section and notification section for selecting a candidate subnetwork having a

QoS capability such as to satisfy the target QoS capability, for which the request has been received by said request reception section, based on the various QoS capabilities being managed

by said management section, and for notifying said element manager corresponding to the selected candidate subnetwork of selection information indicating that the candidate subnetwork has been selected; and

each of said element manager managers further having a control section for controlling the controlling subnetwork based on the selection information notified by said selection and notification section of said network manager.

2.(currently amended): A system for managing a communication network composed of a plurality of subn. tworks, comprising:

a p irality of element managers provided one for each of the plural subnetworks for individual management thereof; and

a n work manager accommodating said plural element managers for concentrated management thereof; wherein

for collecting QoS Quality of Service) capability management information on the corresponding element manager: id notifying said network manager of the collected QoS capability management information;

said network manager having

a management section including a function object group which performs a control of QoS policy prosisioning over the communication network and an information object group which manages nework information of each of the plural subnetworks, and for concentratedly managing various QoS capabilities of the whole communication network, based on the QoS

capability manage nent information collected and notified by the individual element managers.

manager comprising:

3.(current) amended): An element manager for use in a communication network managing system which manages a communication network composed of a plurality of subnetworks and | cludes a plurality of element managers corresponding to the plural subnetworks and | network manager accommodating the plural element managers, said element

a delection and notification section for collecting QoS (Quality of Service) capability manage nent information to be used in managing the corresponding subnetwork, and for notifying the i twork manager of the collected QoS capability management information; and

a dentrol section for controlling the corresponding subnetwork based on information which is obtained by the network manager, said network manager having a function object group which performs a control of QoS policy provisioning over the communication network and an ir ormation object group which manages network information of each of the plural subnetwork and a function of concentratedly managing QoS capabilities of the communication network based on said QoS capability management information collected and notified by said of flection and notification section, and which said information is notified from the network mand er on the candidate subnetwork having a QoS capability such as to satisfy a target QoS capabl ity for the corresponding subnetwork.

4.(current | amended): An element manager for use in a communication network managing system which manages a communication network composed of a plurality of

subnetworks and is cludes a plurality of element managers corresponding to the plural subnetworks, and network manager accommodating the plural element managers, said network manager having a netion object group which performs a control of QoS policy provisioning over the communication network and an information object group which manages network information of each of the plural subnetworks,

wherein stild element manager has a collection and notification section for collecting

QoS (Quality of S: vice) capability management information to be used in managing the

corresponding subset twork, and for notifying the network manager of the collected QoS

capability manager ent information.

5.(currently amended): A network manager for use in a communication network managing system, which manages a communication network composed of a plurality of subnetworks and includes a plurality of element managers corresponding to the plural subnetworks, and innetwork manager accommodating the plural element managers, said network manager comprising:

a magement section including a function object group which performs a control of OoS policy provisioning over the communication network and an information object group which manages network information of each of the plural subnetworks, and for concentratedly managing various oS (Quality of Service) capabilities of the whole communication network, based on QoS capability management information of the corresponding subnetworks, which information has been collected and notified by the individual element managers;

a request reception section for receiving a request for a target QoS capability; and

QoS capability such as to satisfy the target QoS capability, for which the request has been received by said in quest reception section, based on the various QoS capabilities being managed by said management section, and for notifying the element manager corresponding to the selected subnetwork to f selection information that the candidate subnetwork has been selected.

amended): A network manager for use in a communication network managing system which manages a communication network composed of a plurality of cludes a plurality of element managers corresponding to the plural subnetworks, and metwork manager accommodating the plural element managers, rein said network manager has a management section including a function object group which performs a control of QoS policy provisioning over the communication of each of the plural subnetwork and an ir of concentratedly managing various QoS (Quality of Service) capabilities of the whole communication network, based on QoS eability capability management

information of the corresponding subnetworks, which information has been collected and

notified by the individual element managers.

7.(currently amended): A network manager for use in a communication network
managing system
which manages a communication network composed of a plurality of
subnetworks and cludes a plurality of element managers corresponding to the plural
subnetworks, and network manager accommodating the plural element managers, said network

manager comprising [[according to claim 5,]]

Service) capabilities of the whole communication network, based on OoS capability management information of the corresponding subnetworks, which information has been collected and notified by the individual element managers;

a reception section for receiving a request for a target QoS capability; and a selection and notification section for selecting a candidate subnetwork having a QoS capability such as to satisfy the target QoS capability, for which the request has been received by said request has been by said management to section, based on the various QoS capabilities being managed by said management to section, and for notifying the element manager corresponding to the selected subnetwork has been selected.

wherein set in an agement section is constructed to concentratedly manage the various

QoS capabilities of said communication network and those of another communication network independent of the last named said communication network in view of also other QoS capability management information of other subnetworks that constitute said another other communication network.

8.(currently amended): A network manager for use in a communication network managing system, which manages a communication network composed of a plurality of subnetworks and includes a plurality of element managers corresponding to the plural subnetworks, and includes a plurality of element managers corresponding to the plural subnetworks, and includes a plurality of element managers corresponding to the plural element managers, said network manager comprisi g: [[according to claim 5,]]

a lanagement section for concentratedly managing various QoS (Quality of Service) capability es of the whole communication network, based on QoS capability management information of the corresponding subnetworks, which information has been collected and notified by the in ividual element managers;

a sequest reception section for receiving a request for a target OoS capability; and a selection and notification section for selecting a candidate subnetwork having a

QoS capability such as to satisfy the target QoS capability, for which the request has been received by said request reception section, based on the various QoS capabilities being managed by said management section, and for notifying the element manager corresponding to the selected subnetwork has been selected,

wherein aid management section is constructed to manage supported tagging, as additional information, for discrimination on combination of the subnetworks.

9.(current y amended): A network manager for use in a communication network managing system. which manages a communication network composed of a plurality of subnetworks and includes a plurality of element managers corresponding to the plural subnetworks, and includes a plurality of element managers corresponding to the plural subnetworks, and includes a plurality of element managers corresponding to the plural element managers, said network manager comprising: [[according to claim 5,]]

a m magement section for concentratedly managing various QoS (Quality of Service) capability s of the whole communication network, based on QoS capability management information of the corresponding subnetworks, which information has been collected and notified by the individual element managers;

a reliest reception section for receiving a request for a target QoS capability; and

a se ection and notification section for selecting a candidate subnetwork having a

OoS capability suc as to satisfy the target QoS capability, for which the request has been received by said request reception section, based on the various QoS capabilities being managed by said management section, and for notifying the element manager corresponding to the selected subnetwork is of selection information that the candidate subnetwork has been selected, where in said management section is constructed to update the various QoS capabilities of the ommunication network when said QoS capability management information is

managing system a coording to claim 5, wherein said selection and notification section is constructed to previously select two or more of the subnetworks when selecting the candidate subnetworks having communication QoS capabilities such as to individually satisfy the target QoS capability, for which the request has been received by said request reception section, to firstly notify one element manager, corresponding to a first one of the candidate subnetworks, of the previous selection of the plural subnetworks and secondly notify another element manager, corresponding to a second one of the candidate subnetworks, of unable information that the corresponding first candidate subnetwork cannot be controlled, upon receipt of the unable information as a response from the element manager corresponding to the first candidate subnetwork.

updated.

11.(currently amended): A network manager for use in a communication network managing system, which manages a communication network composed of a plurality of subnetworks and includes a plurality of element managers corresponding to the plural subnetworks, and a network manager accommodating the plural element managers, said network manager comprising: [[according to claim 5,]]

an anagement section for concentratedly managing various QoS (Quality of Service) capabilit as of the whole communication network, based on QoS capability management information of the corresponding subnetworks, which information has been collected and notified by the information managers;

a s lection and notification section for selecting a candidate subnetwork having a

QoS capability such as to satisfy the target QoS capability, for which the request has been received by said request reception section, based on the various QoS capabilities being managed by said management section, and for notifying the element manager corresponding to the selected subnetwork k of selection information that the candidate subnetwork has been selected.

wherein said selection and notification section is constructed to select two or more of the subnetwork: according to preset priorities when selecting the candidate subnetworks having QoS capabilities such as to individually satisfy the target QoS capability, for which the response has been ecceived by said request reception section, and to notify one element manager, corresponding to a higher-priority one of the candidate subnetworks, of the selection.

12.(curred ly amended): A computer-readable recording medium in which a program is

recorded for instructing a computer to be used in a communication network management system including a plural y of element managers corresponding to a plurality of subnetworks that constitute a communication network, and a network manager accommodating the plural element managers, wherei said program instructs said computer to function as the following:

col ecting and notifying means for collecting QoS (Quality of Service) capability management info nation on [[the]] a corresponding element manager and notifying said network manager of the cd lected QoS capability management information; and

col trol means for controlling the corresponding subnetwork based on information which is obtained by the network manager, the network manager including a function object group which perfe a control of OoS policy provisioning over the communication network and an information of ect group which manages network information of each of the plural subnetworks and lso having a function of concentratedly managing various QoS capabilities of the whole communication network based on said QoS capability management information collected and not ied by said collecting and notifying means and which is notified from the network manager in the candidate subnetwork having a QoS capability such as to satisfy a target OoS capability for the individual subnetwork.

managers,

13.(curre tily amended): A computer-readable recording medium in which a program is recorded for instructing a computer to be used in a communication network managing system including a plural ty of element managers corresponding to a plurality of subnetworks that constitute a communication network, and a network manager accommodating the plural element

whe ein said program instructs said computer to function as collecting and notifying means for collecting various QoS capability management information on the individual element managers and notifying said network manager of the collected QoS capability management information, the network manager including a function object group which perform a control of QoS per licy provisioning over the communication network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function network and an information object group which manager including a function object group which ma

14.(currently amended): A computer-readable recording medium in which a program is recorded for instructing a computer to be used in a communication network managing system including a plurality of element managers corresponding to a plurality of subnetworks that constitute a communication network, and a network manager accommodating the plural element managers, wherein aid program instructs said computer to function as the following:

communication ne vork and managing network information of each of the plural subnetworks,
and for concentrate lly managing various QoS (Quality of Service) capabilities of the whole
communication ne vork, based on QoS capability management information of the corresponding
subnetworks, whic information is collected and notified by the individual element managers;

requisit receiving means for receiving a request for target QoS capability; and selecting and notifying means for selecting a candidate subnetwork having a QoS capability such as satisfy the target QoS capability, for which the request has been received by said request receiving means, based on the QoS capabilities being managed by said managing

means, and for no ifying the element manager corresponding the selected subnetwork of selection information that the candidate subnetwork has been selected.

15.(currently amended): A computer-readable recording medium in which a program is recorded for instructing a computer to be used in a communication network management system including a plural by of element managers corresponding to a plurality of subnetworks that constitute a communication network, and a network manager accommodating the plural element managers,

wherein aid program instructs said computer to function as managing means including performing a control of QoS policy provisioning over the communication network and managing network information of the plural subnetworks, and for concentratedly managing various QoS (Quality of Service) capabilities of the network, based on QoS capability management information of the corresponding subnetworks, which information has been collected and notified by the intividual element managers.

16.(original): A network manager for use in a communication network managing system according to claim 7, wherein said management section is constructed to manage supported taggin; as additional information, for discrimination on combination of the subnetworks.

17.(original): A network manager for use in a communication network managing system according to claim 16, wherein said management section is constructed to update the

various QoS capabilities of the communication network when said QoS capability management information is updited.

18.(currently amended): A network manager for use in a communication network managing system a cording to claim 8, wherein said management section is constructed to update the various los capabilities of the communication network when said QoS capability management information is updated.

19.(current) amended): A network manager for use in a communication network managing system a cording to claim 6, which manages a communication network composed of a plurality of subnet orks and includes a plurality of element managers corresponding to the plural subnetworks, and a network manager accommodating the plural element managers.

managing various os (Quality of Service) capabilities of the whole communication network,

based on QoS capal ility management information of the corresponding subnetworks, which

information has been collected and notified by the individual element managers, and

wherein said management section is constructed to concentratedly manage the various QoS capabilities of said communication network and those of another communication network independent of the last-named said communication network in view of also other QoS capability management section is constructed to concentratedly manage the various QoS capabilities of said communication network and those of another communication network in view of also other QoS capability management section is constructed to concentratedly manage the various QoS capabilities of said communication network and those of another communication network in view of also other QoS capability management section is constructed to concentratedly manage the various QoS capabilities of said communication network and those of another communication network in view of also other QoS capability management section is constructed to concentratedly manage the various QoS capabilities of said communication network and those of another communication network in view of also other QoS capability management section of other subnetworks that constitute said another other communication network in view of also other other capabilities are constituted and the constitute said another other communication networks.

20.(original): A network manager for use in a communication network managing system according to claim 19, wherein said management section is constructed to manage supported tagging as additional information, for discrimination on combination of the subnetworks.

21.(original): A network manager for use in a communication network managing system according to claim 20, wherein said management section is constructed to update the various QoS capabilities of the communication network when said QoS capability management information is up, ated.

22.(currer ly amended): A network manager for use in a communication network managing system seconding to claim 6, which manages a communication network composed of a plurality of subnetwork.

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23.(original): A network manager for use in a communication network managing

system according of claim 22, wherein said management section is constructed to update the various QoS capabilities of the communication network when said QoS capability management information is updated.

24.(current , amended): A network manager for use in a communication network managing system— cording to claim 6, which manages a communication network composed of a plurality of subnet orks and includes a plurality of element managers corresponding to the plural subnetworks and a network manager accommodating the plural element managers, who said network manager has a management section for concentratedly managing various os (Quality of Service) capabilities of the whole communication network, based on QoS caps of the management information of the corresponding subnetworks, which information has been collected and notified by the individual element managers, and who said management section is constructed to update the various QoS

capabilities of the ammunication network when said QoS capability management information is updated.

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